

GLOSSARY

Acre-Foot (ac-ft) - The volume of water it takes to cover one acre of land (a football field is about 1.3 acres) with one foot of water; 43,560 cubic feet or 325,850 gallons. One acre-foot is approximately the amount of water needed to supply a family of four with enough water for one year (assuming a use rate of 225 gpcd).

Animal Feedlot Operations (AFO) - A lot or facility where animals have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period; and where crops, vegetation, forage growth, or post-harvest residues are not sustained over any portion of the lot or facility in the normal growing season.

Aquifer - A geologic formation that stores and/or transmits water. A confined aquifer is bounded above and below by formations of impermeable or relatively impermeable material. An unconfined aquifer is made up of loose material, such as sand or gravel, that has not undergone settling, and is not confined on top by an impermeable layer.

Beneficial Use - Use of water for one or more of the following purposes including but not limited to, domestic, municipal, irrigation, hydro power generation, industrial, commercial, recreation, fish propagation, and stock watering; the basis, measure and limit of a water right.

Commercial Use - Water uses normally associated with small business operations which may include drinking water, food preparation, personal sanitation, facility cleaning and maintenance, and irrigation of landscapes.

Concentrated Animal Feedlot Operations (CAFO) - An animal feedlot operation (see above) where more than 1,000 animal units are confined, or 301 - 1,000 animal units are confined and waters of the United States pass through the facility or the operation discharges via a man-made device into waters of the United States. Also, AFOs can be designated as CAFOs on a case-by-case basis if the NPDES permitting authority determines that it is a significant contributor of pollution to waters of the U.S.

Conjunctive Use - Combined use of surface and ground water systems to optimize resource use and minimize adverse effects of using a single source.

Conservation - According to Webster's Dictionary, conservation is the act or process of conserving, where conserve is defined as follows: (1) To protect from loss or depletion, or (2) to use carefully, avoiding waste. In this document, the second definition is used exclusively. However, in the water resources field the first definition is also used. Using the first definition, constructing a reservoir to capture excess runoff in order to more fully utilize the water is also considered conservation.

Consumptive Use - Consumption of water for residential, commercial, institutional, industrial, agricultural, power generation and recreational purposes. Naturally occurring vegetation and wildlife also consumptively use water.

Culinary Water - See "Potable Water."

Depletion - The net loss of water through consumption, export and other uses from a given area, river system or basin. The terms consumptive use and depletion, often used interchangeably, are not the same.

Developable - That portion of the available water supply that has not yet been developed but has the potential to be developed. In this document, developable refers to the amount of water that the Division of Water Resources estimates can be developed based on *current* legal, political, economic and environmental constraints.

Diversion - Water diverted from supply sources such as streams, lakes, reservoirs, springs or wells for a variety of uses including cropland irrigation and residential, commercial, institutional, and industrial purposes. This is often referred to as withdrawal.

Drinking Water - See "Potable Water."

Dual Water System - See "Secondary Water System."

Efficiency - The ratio of the effective or useful output to the total input in a system. In agriculture, the overall water-use efficiency can be defined as the ratio of crop water need (minus natural precipitation) to the amount of water diverted to satisfy that need.

Eutrophication - The process of increasing the mineral and organic nutrients which reduces the dissolved oxygen available within a water body. This condition is not desirable because it encourages the growth of aquatic plants and weeds, is detrimental to animal life, and requires further treatment to meet drinking water standards.

Evapotranspiration - The scientific term which collectively describes the natural processes of evaporation and transpiration. Evaporation is the process of releasing vapor into the atmosphere through the soil or from an open water body. Transpiration is the process of releasing vapor into the atmosphere through the pores of the skin of the stomata of plant tissue.

Export - Water diverted from a river system or basin other than by the natural outflow of streams, rivers and ground water, into another hydrologic basin. The means by which it is exported is sometimes called a transbasin diversion.

Gallons per Capita per Day (gpcd) - The average number of gallons used per person each day of the year for a given purpose within a given population.

Ground Water - Water which is contained in the saturated portions of soil or rock beneath the land surface. It excludes soil moisture which refers to water held by capillary action in the upper unsaturated zones of soil or rock.

Hydrology - The study of the properties, distribution, and effects of water in the atmosphere, on the earth's surface and in soil and rocks.

Incentive Pricing - Pricing water in a way that provides an incentive to use water more efficiently. Incentive pricing rate structures include a base fee covering the system's fixed costs and a commodity charge set to cover the variable costs of operating the water system.

Industrial Use - Use associated with the manufacturing or assembly of products which may include the same basic uses as a commercial business. The

volume of water used by industrial businesses, however, can be considerably greater than water use by commercial businesses.

Institutional Use - Uses normally associated with operation of various public agencies and institutions including drinking water; personal sanitation; facility cleaning and maintenance; and irrigation of parks, cemeteries, playgrounds, recreational areas and other facilities.

Instream Flow - Water maintained in a stream for the preservation and propagation of wildlife or aquatic habitat and for aesthetic values.

Mining - Long-term ground water withdrawal in excess of natural recharge. (See "Recharge," below.) Mining is usually characterized by sustained (consistent, not fluctuating) decline in the water table.

Municipal Use - This term is commonly used to include residential, commercial and institutional water use. It is sometimes used interchangeably with the term "public water use," and excludes uses by large industrial operations.

Municipal and Industrial (M&I) Use - This term is used to include residential, commercial, institutional and industrial uses.

Nonpoint Source Pollution (NPS) - Pollution discharged over a wide land area, not from one specific location. These are forms of diffuse pollution caused by sediment, nutrients, etc., carried to lakes and streams by surface runoff.

Nutrient Loading - The amount of nutrients (nitrogen and phosphorus) entering a waterway from either point or nonpoint sources of pollution. Nutrients are a byproduct of domestic and animal waste, and are present in runoff from fertilized agricultural and urban lands. Nutrients are not typically removed from wastewater effluent, and if present in excessive amounts result in growth of aquatic weeds and algae.

Phreatophyte - A plant species which extends its roots to the saturated zone under shallow water table conditions and transpires ground water. These plants are high water users and include such species as tamarisk, greasewood, willows and cattails.

Point Source Pollution - Pollutants discharged from any identifiable point, including pipes, ditches, channels and containers.

Potable Water - Water meeting all applicable safe drinking water requirements for residential, commercial and institutional uses. This is also known as culinary or drinking water.

Private-Domestic Use - Includes water from private wells or springs for use in individual homes, usually in rural areas not accessible to public water supply systems.

Public Water Supply - Water supplied to a group through a public or private water system. This includes residential, commercial, institutional, and industrial purposes, including irrigation of publicly and privately owned open areas. As defined by the State of Utah, this supply includes potable water supplied by either privately or publicly owned community systems which serve at least 15 connections or 25 individuals at least 60 days per year.

Recycling - See "Reuse."

Recharge - Water added to an aquifer or the process of adding water to an aquifer. Ground water recharge occurs either naturally as the net gain from precipitation, or artificially as the result of man's influence. Artificial recharge can occur by diverting water into percolation basins or by direct injection into the aquifer with the use of a pump.

Residential Use - Water used for residential cooking; drinking; washing clothes; miscellaneous cleaning; personal grooming and sanitation; irrigation of residential lawns, gardens, and landscapes; and washing automobiles, driveways, etc.

Reuse - The reclamation of water from a municipal or industrial wastewater conveyance system. This is also known as recycling.

Riparian Areas - Land areas adjacent to rivers, streams, springs, bogs, lakes and ponds. They are ecosystems composed of plant and animal species highly dependent on water.

Safe Yield - The amount of water which can be withdrawn from an aquifer on a long-term basis without serious water quality, net storage, environmental or social consequences.

Secondary Water System - Pressurized or open ditch water delivery system of untreated water for irrigation of privately or publicly owned lawns, gardens, parks, cemeteries, golf courses and other open areas. These are sometimes called "dual" water systems.

Self-supplied Industry - A privately owned industry that provides its own water supply.

Stakeholders - Any individual or organization that has an interest in water management activities. In the broadest sense, everyone is a stakeholder, because water sustains life. Water resources stakeholders are typically those involved in protecting, supplying, or using water for any purpose, including environmental uses, who have a vested interest in a water-related decision.

Total Maximum Daily Load (TMDL) - As defined by the EPA, a TMDL "is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. [Its] calculation must include a margin of safety to ensure that the water body can be used for the purposes the State has designated. The calculation must also account for seasonal variation in water quality." The TMDL must also provide some "reasonable assurance" that the water quality problem will be resolved. The states are responsible to implement TMDLs on impaired water bodies. Failure to do so will require the EPA to intervene.

Water Audit - A detailed analysis and accounting of water use at a given site. A complete audit consists of an indoor and outdoor component and emphasizes areas where water could be used more efficiently and waste reduced.

Water Yield - The runoff from precipitation that reaches water courses and therefore may be available for human use.

Watershed - The land above a given point on a waterway that contributes runoff water to the flow at that point; a drainage basin or a major subdivision of a drainage basin.

Wetlands - Areas where vegetation is associated with open water and wet and/or high water table conditions.

Withdrawal - See "Diversion."